Appendix C

EMERGENCY AND RESCUE PROCEDURES:

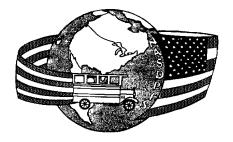
A GUIDELINE MANUAL FOR SCHOOL BUS INVOLVEMENT



NASDPTS Task Force:

Harlan Tull, Chairman Michael Roscoe, Kentucky Ron Kinney, California Len Nachman, Minnesota John Dattalo, Pennsylvania

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National Association of State Director of Pupil Transportation Services

Dear Emergency Manual Recipient:

At the request of the National Transportation Safety Board (NTSB) and with concurrence of the National Highway Traffic Safety Administration (NHTSA), the National Association of State Directors of Pupil Transportation Services (NASDPTS) were asked to develop a procedural manual for interaction of various agencies in the event of a school bus accident or other disaster.

A task force was developed, naming Harlan Tull-Del as Chair, and members Ron Kinney-CA, Michael Roscoe-KY, Ken Nachman-MN, John Dattalo-PA and Terry Voy-IA, later joined the group. The assistance of Lt. Barry Beck of the Delaware State Police, and Joe Murabito and Phil Young of Delaware State Fire School, was deeply appreciated.

This manual is issued to each State Director for Pupil Transportation Services for reproduction and dissemination to all first responders in each state. This includes police, fire, ambulance, emergency medical technicians and anyone else designated to respond to school bus accidents or disasters.

This manual is copyrighted and is <u>not for sale</u> by anyone without express permission of the National Association of State Directors of Pupil Transportation Services.

States may add any information or laws indigenous to their state but must give credit to NASDPTS as the source. Both paper version and diskette form of this manual are issued to each state.

The manual is comprised of sections for each first responder agency but please read the whole manual so you can see who is doing what. The appendices are especially important as well.

Good luck. Remember: "Kids Come First". Please take care of our future - the children.

Sincerely,

Harlan Tull President, NASDPTS

CONTENTS

Foreword	
Emergency Response: Transportation Personnel	1
Guidelines For Enroute Emergency Bus Evacuation	1
Preparing An Emergency Evacuation Plan	1
Emergency Procedures	1
Safe Riding Practices	2
School District Pre-Emergency Plan	3
School Bus Driver Pre-Emergency	3
Assessing The Need To Evacuate	5
General Procedures To Follow	6
Instructions For Conducting Emergency	
Evacuation Drills	7
Special Education Bus Driver	
Emergency Procedures	11
Evacuation Procedures for Activity	
Trips and Field Trips	14
Bus Driver Presentation	15
Local District Policy	16
Accident Procedures	17
Emergency Response	19
Preface	
Pre-Planning	21
Accident/Incident Command	22
Bus Fuel Systems	22
Evacuation Procedures	
Restraining Devices	23
Emergency Release Guidelines	
Special Mechanical Equipment	24
Additional Equipment	25
Assistance	25
Police, Fire, Ambulance and Rescue Operations Response	26
Vehicle Evacuation	26
Emergency Equipment on School Buses	
Emergency Exits	
Roof/Vent Emergency Escape Hatch	
Operation Schedule	
Special Assessments	
Notification	
Investigation	33

Appendix A	Appendix 1
Classification Of Fires	Appendix 1
Appendix B	Appendix 2
Red Emergency Reflectors	Appendix 2
Appendix C	Appendix 5
Wheelchair Inspection Procedure	
Appendix D	Appendix 7
Special Education Seating Chart	Appendix 7
Appendix E	Appendix 9
Emergency Facilities	
Appendix F	Appendix 10
Techniques For a Simulated Bus Evacuation	Appendix 10
Introduction	Appendix 10
Purpose	Appendix 10
Driver Responsibility	
Gaining Rapport And Teaching Control	Appendix 11
Bus Preparation Prior To Presentation	Appendix 12
Safe Riding Practices	Appendix 12
Danger Zones	Appendix 13
Student Responsibilities	
Summary	Appendix 15
Visual Aids	Appendix 15
Evacuation Drills	Appendix 15
Front Door	Appendix 15
Rear Floor Level Door	Appendix 17
Side Emergency Door	Appendix 18
Left And Rear Floor Levels Doors	Appendix 20
Rear, Side, Front Floor Level Doors	Appendix 21
Front And Side Floor Level Doors	Appendix 23
Rear Floor Level Door	Appendix 24
Summary	Appendix 26
Appendix G	Appendix 27
Driver Presentation	Appendix 27
Appendix H	Appendix 30
Brief Descriptions of Special Education Students	
And Suggested Emergency Evacuation Procedures	Appendix 31

FOREWORD

School bus accidents can happen anywhere, anytime or involve anyone. Time of day, day of week, weather conditions, road surface conditions, construction, the other vehicle, or our own passengers, can all be contributing factors. There doesn't have to be an accident to cause the evacuation of the school bus. An on-board fire or the school bus stalling in a dangerous place like a railroad crossing could be reason to evacuate the bus. These are but a few of the causes to evacuate.

What do you do in case of an accident? Whose responsibility is it to take what action? The school bus driver is usually the only adult immediately available. The radio may be available to call for assistance but some school buses are not radio equipped and in some cases the radio is out of service due to the fire or accident. What are the contingency plans to seek help in an emergency?

When emergency responders (fire, police or ambulance) arrive on the scene, who is in charge? Clearly the school bus driver or transportation official is not responsible for ambulance, police or rescue personnel.

Do you have a contingency plan to cover the many aspects of accident and other emergency procedures? The school bus driver will surely evacuate the pupils - but have you trained for this procedure? Do you have a plan and have you practiced emergency evacuation procedures? Has your state or district set in motion plans and practices for responsibilities for different aspects of emergency procedures and with the other agencies involved?

Water rescue and natural disaster incidents involving the school bus are not sufficiently different situations to cause a separate section of this manual. In your planning, include references to those types of emergencies as well as the situations referred to in the body of this manual.

The more you think about it, there certainly is a lot to think about; a lot to plan for; a lot to train for; a lot to practice for. We carry the world's most precious product, the future of our nation. We must be ready.

Presented here is a set of practical guidelines for putting together an emergency preparedness procedure for school bus evacuation. Police, fire, ambulance and school transportation officials assisted in its preparation.

EMERGENCY RESPONSE:

TRANSPORTATION PERSONNEL

GUIDELINES FOR ENROUTE EMERGENCY BUS EVACUATION

The intent of this procedure is to provide guidelines for evacuating a bus only when <u>absolutely</u> necessary for the safety of students and staff in an emergency situation.

PREPARING AN EMERGENCY EVACUATION PLAN

Transportation staff should have an emergency evacuation plan which considers the individual capabilities and needs of each student, the type of behavior which might be exhibited during an emergency evacuation, and the type of wheelchair or support equipment being used for students. Some issues to consider in establishing an evacuation plan are:

- 1. Which students could help, and to what extent.
- 2. How to deal with individual emergencies during the evacuation process, such as seizures.
- 3. Whether students should be evacuated in their wheelchairs, or removed from their wheelchairs before evacuation.
- 4. How to disconnect or cut wheelchair securement and occupant protection equipment, including belts, trays, and other support equipment.
- 5. Identify which students might run following evacuation so they could be evacuated with the driver or aide.
- 6. Know the length of time a student requiring life support equipment or medical care procedures can survive if such service is interrupted or delayed during the evacuation process.

Every driver and/or paraprofessional should be able to physically carry-out the emergency evacuation plan upon request without hesitation. Many emergencies only allow 2 to 5 minutes to complete an evacuation before possible serious injury to students might occur.

EMERGENCY PROCEDURES

Each school district should have a pre-emergency plan. This plan should be carefully thought through and developed in cooperation with all those whose services would be required in the event of various types of emergencies. The school transportation supervisor, school administrators, teachers, drivers, maintenance and service personnel, students and others should be instructed in the procedures to be followed in the event of the contingencies provided for in the plan.

May 2001

Following are examples of contingencies other than an accident or vehicle fire (Appendix A) that should be planned for:

- * Sudden Disability of Driver
 Procedure for handling situations resulting in the fatal injury or disability of the bus driver should be established and communicated to the pupils.
- * Road Failure

 Here the pre-emergency plan should cover the procedure for securing the bus, assessing the need to evacuate, disposition, and controlling of the passengers, diagnosing the cause(s) of the road failure, notifying school officials, securing alternate equipment, pre-trip inspection of alternate equipment by the driver and repairing and recovering the disabled school bus. This type of road failure could be in such a hazardous location that the school bus should be evacuated.

SAFE RIDING PRACTICES (Appendix F)

Some accidents are indirectly caused by students who distract the bus driver. A program of instruction in safe riding practices is necessary to make students aware that, as passengers, they are responsible for their own safety as well as the safety of others.

Good pupil behavior while entering, riding, or leaving the bus contributes in many ways to safe transportation. Such conduct makes it possible for the driver to give full attention to the routine matters involved in the safe operation of the bus and holds to a minimum those conditions that might cause pupils to be injured. You will no doubt be asked by your transportation department to help instruct students in safe bus riding practices. Programs that are developed should stress: safe riding practices, loading and unloading procedures, proper seat position, red-light crossover procedures, proper noise level, student responsibility, and general behavior for bus passengers.

Because drivers are charged with the responsibility of the bus and its passengers at all times, it is essential they become completely trained with every aspect of safe riding practices. School bus drivers and pupils should <u>not</u> exit the bus if the bus is involved in an accident with downed power lines. They are safe in the bus and may be electrocuted if they tried to exit the vehicle. (The rubber wheels ground the bus. As soon as you step foot outside the bus your body will act as a conductor and you will be electrocuted.)

SCHOOL DISTRICT PRE-EMERGENCY PLAN

If a prior pre-emergency plan for each school bus on a particular school bus route has been generated, it will save precious minutes, time available to meet some other aspect of the emergency.

Police, fire, ambulance and emergency rescue personnel all receive training, and in large measure, know their jobs. The school bus presents a unique bearing on their jobs, however. The school bus generally has a lot of passengers confined in a small area. While it has the service door and the rear emergency exit door as readily available escape routes, each window is a potential escape route also. At a minimum the side windows, through body specifications, should provide an unobstructed emergency opening at least 9 inches high and 22 inches wide, obtained by lowering the window. Many school buses are equipped with emergency push-out type windows. Still other states may mandate one or two emergency doors on the bus and larger windows (i.e., opening at least 12 inches high and 24 inches wide.)

There is no way that the police, fire and other emergency personnel are going to know the escape passageways of each particular school bus, but by each school district transportation office working with these agencies and sharing information, the agency personnel will grasp the concept of what is available. (Those agencies will note the specific sections of this manual for their part in the evacuation/rescue mission.)

THE SCHOOL BUS DRIVER PRE-EMERGENCY

The transportation officials should assist in developing the pre-emergency plan so that there is continuity among all drivers in the school district. The following are tasks that should be a part of any emergency plan:

- 1. The school bus evacuation plan Successive pages will detail what information is needed to set up the evacuation plan itself and how to conduct emergency drills. It cannot be stressed enough that training of school bus drivers and pupils is paramount if we are to be successful. Many states mandate that formal school bus evacuation drills be conducted at least twice yearly. This encompasses the off-loading of the pupils so that they will know exactly what to do in the event of a real emergency. This should also include the evacuation of the special needs pupils. Evacuation procedures for special needs pupils should be well known and rehearsed. Planning is ineffective without practice.

 (Appendix F)
- 2. The bus route Know the location of fire stations, police stations and hospitals in the area. Most emergencies the bus driver faces entail the immobilization of the school bus and the determination of evacuating or not. Knowledge of the location of fire, police and hospitals could save a life. (Appendix E)

Knowledge of the route, even for the substitute or extra driver, helps the responding emergency personnel get to the school bus much faster. Whether the driver has radio contact with the dispatcher or must ask the assistance of others to telephone the request for emergency aid is of little good if the exact location is not given.

- 3. School bus emergency information It is quite helpful, when the assistance of others is needed, to have the school bus information on a card. If you need to have someone else telephone for help, this base information would not have to be repeated or written down. The card should include the bus and route number and the school district name, address, and telephone number. This card information could have other supplemental data but only the most important base data should be included so as not to confuse the person calling in for you. Many areas of the country have the type of pay telephones which allow an emergency telephone call to 911 or police and fire without cost. If your area does not have that arrangement, two quarters should be taped to this card to allow the caller to summon emergency aid in a timely fashion.
- 4. The school bus The driver should know the basics of the school bus components to allow them to better assess the seriousness of the situation. Just as one should not open the hood in the event of an engine fire, one should be able to assess an overheated motor or a broken radiator hose. The advent of a mandatory commercial drivers license with the expanded pre-trip inspection serves well in this instance, but does not cover everything and should not preclude additional training of the school bus driver to incorporate this type of school bus knowledge.
- 5. Route Plan The school bus driver or any of the pupils (regular or special education) could have a medical emergency and a procedure should be developed along local guidelines on how to handle this situation. Questions to be considered and answers should be enumerated on:
 - Does the driver pull over and call emergency medical services?
 - Should the driver proceed to the nearest school, medical facility, police or fire station?
 - Does the school or school district have a medical consent form from the parents so that prehospital and hospital personnel can treat the pupil? Should that be considered or should you react only to the emergency phone numbers on the school health card?
 - There is a "National Standard Curriculum for Bystander Care." Children are particularly referenced in this manual. Should it apply in some or all cases? Check your state laws.

ASSESSING THE NEED TO EVACUATE

Student safety and control is best maintained by keeping students on the bus during an emergency and/or impending crisis situation, if doing so does not expose them to unnecessary risk or injury. A decision to evacuate should include consideration of the following conditions:

- 1. Recognize the hazard. The decision to exit/evacuate the bus must be a timely one. Wheelchair students take a lot more time.
- 2. Is there a fire involved? (Appendix A)
- 3. Is there a smell of raw or leaking fuel?
- 4. Is the bus likely to be hit by other vehicles?
- 5. Does the possibility exist that the bus will roll/tip causing further threat to safety?
- 6. Is the bus in direct path of a sighted tornado?
- 7. Has there been a major earthquake creating a dangerous environment?
- 8. Would removing students expose them to speeding traffic, severe weather, or a dangerous environment such as downed power lines?
- 9. Would moving pupils complicate injuries such as neck, back and other fractures?
- 10. Is there a hazardous materials spill involved? It may be safer to remain on the bus and not come in contact with the material.

GENERAL PROCEDURES TO FOLLOW FOR EMERGENCY EVACUATION

Keep the situation as orderly and low key as possible. If time and conditions permit, the bus driver should use the communication system to advise the dispatch office of the following:

- 1. The exact location, including the nearest intersecting road or familiar landmark
- 2. The condition creating the emergency.
- 3. The type of assistance needed. (police, fire, ambulance)
- 4. Notification that the bus is being evacuated.

Analyze conditions to determine the safest exit(s) from the bus.

During evacuation, monitor conditions and adjust procedures to meet unexpected circumstances. The driver may have to conduct the evacuation from outside the bus.

Move evacuated students to the nearest safe location at least 100 feet from the bus. The dispersal/regrouping area must be upwind of any fire situation.

After the decision to evacuate is made, take the first aid kit with you. If there is a radio or telephone in the school bus, put it out the drivers left window in case it is still operable. This allows additional information to be transmitted to the dispatcher or emergency center.

May 2001

Be prepared to give information to emergency medical personnel regarding individual students' medical or physical requirements.

Each school bus driver should have:

- 1. A manifest with student names.
- 2. Knowledge of seating or seating chart.
- 3. Knowledge of individual students abilities:
 - a. Runners
 - b. Helpers
 - c. Those who will panic
 - d. Those who will need help
 - e. By disability, communication ability, mobility
- 4. Assignments of students to seats:
 - Use the "buddy" system. Those that can help seated by those who need help.

- 5. Develop plans to control students outside the bus:
 - a. Hold hands
 - b. Sit down in a circle
 - c. Keep occupied until help arrives

INSTRUCTIONS FOR CONDUCTING EMERGENCY BUS EVACUATION DRILLS

There is an urgent need, due to the increased number of pupils being transported and the ever-increasing number of accidents on the highways, to instruct pupils on how to properly vacate a school bus in case of an emergency. It is possible for pupils to block the emergency door if all are trying to get out at the same time. There is also a possibility of danger when pupils jump from the rear emergency door exit. To avoid these situations, schools should organize and conduct emergency exit drills for all pupils who ride the school bus.

REASONS FOR ACTUAL EMERGENCY EVACUATIONS:

- 1. Fire or danger of fire. Being near an existing fire and unable to move the bus, or being near the presence of gasoline or other combustible material is considered dangerous and pupils should be evacuated. The bus should be stopped and evacuated immediately if the engine or any other portion of the bus is on fire. Pupils should be moved to a safe place 100 feet or more from the bus and instructed to remain there until the driver has determined that the danger has passed. (Appendix A)
- 2. Unsafe position. When the bus is stopped because of an accident, mechanical failure, road conditions, or human failure, the driver must determine immediately whether it is safer for pupils to remain on the bus or to evacuate the bus. (Appendix B)
- 3. Sight distance. In normal traffic conditions, the bus should be visible for a distance of 300 feet or more. A position over a hill or around a curve where such visibility does not exist should be considered reason for evacuation.
- 4. Mandatory evacuations. The driver must evacuate the bus when:
 - a. The final stopping point is in the path of a train or adjacent to railroad tracks.
 - b. The stopped position of the bus may change and increase danger (e.g. a bus comes to rest near a body of water or a precipice where it could still move and go into the water or over a cliff). The driver should be certain that the evacuation is carried out in a manner which affords maximum safety for the pupils.

- c. The stopped position of the bus is such that there is danger of collision.
- d. A hazardous materials spill has occurred. There is a need to quickly evacuate to an area upwind at least 300 feet from the incident.

IMPORTANT FACTORS PERTAINING TO SCHOOL BUS EVACUATION DRILLS:

- 1. Safety of pupils is of the utmost importance and must be first priority. <u>Training</u>, not teaching, is the key word, especially if there is a particular group that will <u>not</u> remember. (Appendix G)
- 2. All drills should be supervised by the principal or by persons assigned to act in a supervisory capacity. Police, rescue and fire personnel should be invited to participate in this training event so as to be prepared for a school bus emergency.
- 3. The bus driver is responsible for the safety of the pupils. When the driver is incapacitated and unable to direct the evacuation, school patrol members, appointed pupils or adult monitors should be authorized to direct the evacuation. It is important to have regular substitutes available. An effective driver and aide team is one that provides for a systematic arrangement of the vehicle environment which encourages appropriate pupil behavior. (Appendix F)

Pupils appointed to assist with evacuation drills should possess the following qualifications (Many jurisdictions require parental consent for these pupils):

- a. Maturity.
- b. Good citizenship.
- c. Live near end of bus route.

Appointed pupils should know how to:

- a. Turn off ignition switch/shut down engine.
- b. Set emergency brake.
- c. Summon help when and where needed.
- d. Use emergency windows or emergency escape exits.

C-7

- e. Open and close doors.
- f. Account for all pupils passing their station.
- g. Help small pupils off the bus.
- h. Set out warning reflectors.
- i. Use two way radio to summon help.
- j. Perform other duties as assigned.

May 2001

- 4. Drills should be scheduled in a manner similar to fire drills held regularly in schools. They should be held more often during fall and spring months and conducted when the bus arrives at the school building with the pupils.
- 5. Drills should be restricted to school property and conducted under the supervision of school officials.
- 6. Types of drills should be varied.
- 7. Driver should stay in bus during the evacuation drill. He/she must set the parking brake, turn the engine off and place the manual transmission in gear.
- 8. Pupils should not be permitted to take lunch boxes, books, etc., with them when they leave the bus. The objectives are to get pupils off safely in the shortest time possible, and in an orderly fashion.
- 9. Pupils should be directed to a safe area at least 100 feet from the bus in an emergency drill and remain there until given further directions.
- 10. All pupils should participate in the drill, including those who ride only on special trips.
- 11. Each pupil should be instructed in proper safety precautions.
- 12. Pupils should be instructed in how and where to obtain assistance in emergencies. Written instructions and telephone numbers should be posted on the bus.

THERE ARE SEVERAL DIFFERENT DRILLS AVAILABLE

- 1. Front door evacuation. (Appendix F)
- 2. Rear floor-level emergency exit door evacuation. (Appendix F)
- 3. Side emergency exit door evacuation. (Appendix F)
- 4. Left, and rear floor-level exit doors evacuation. (Appendix F)
- 5. Rear, side and front floor-level exit doors evacuation. (Appendix F)
- 6. Front and side floor-level exit doors evacuation. (Appendix F)
- 7. Left rear floor-level emergency exit door evacuation. (Appendix F)
- 8. All rear engine buses are equipped with a left side emergency exit door in lieu of a rear emergency exit door. Exception: The rear windows become an emergency exit if the bus is on its side.
- 9. Students should be familiar with the operation of emergency exit windows, both side and rear, and roof hatches. All exits should be opened by students during evacuation drills to ensure their ability to operate such devices.
- 10. Every school bus driver shall ensure the students assigned to their bus are familiar with the emergency exit configuration of the assigned bus.

11.	Seat rows and positions are identified on all buses and should be used for seating and identification of all students. (Appendix D)
May 2001	C-9

SPECIAL EDUCATION BUS DRIVER EMERGENCY PROCEDURES

In the event of a major emergency (fire, flood, earthquake, collision with another vehicle or at a railroad crossing), the school bus driver's first responsibility is the safety and welfare of the students.

The bus driver <u>will</u> follow the emergency guidelines listed below, to the best of his/her ability. Passengers on the bus, both students and adults, <u>will</u> act under the driver's instructions.

DURING EMERGENCY - THE BUS DRIVER WILL

- 1. First bring the bus to a stop, in the safest possible location, then set the parking brake. Turn ignition to accessory and:
 - a. Activate the hazard lights.
 - b. Remain calm. Reassure students.
 - c. Notify dispatch via 2-way radio, if possible.
 - d. Turn on your AM-FM radio for disaster messages, if the bus is so equipped.
 - e. The decision to exit or evacuate the bus must be a timely one. (Wheelchair students take a lot more time to evacuate)
- 2. Survey the scene, evaluate the circumstances, and determine:
 - a. Is it safe to continue driving the bus? (see IV.)
 - b. Is it safer to remain where parked? (see V.)
 - c. Is it safer to evacuate the passengers? (see VI.)
 - (1.) Recognize the hazard, give the order to evacuate, and evacuate using all available exits.
 - (2.) Re-group in a safe place, near the bus.
 - (3.) Remember, it is generally safer to remain on the bus.
- 3. If a paraprofessional (bus aide) is riding, enlist their assistance.
 - a. Give explicit instructions to the paraprofessional.
 - (1.) Check to make sure you are understood.
- 4. If you determine it is safe to continue, the emergency guidelines are as follows: (first notify dispatch, if possible)
 - a. Morning or mid-day runs going to school:

- (1.) Continue on route. Collect students and take to assigned school. **or**
- (2.) Proceed to the nearest mass care facility. (Listen to your AM-FM and two-way radios for information), **or**
- (3.) Proceed to the nearest school.
- b. Afternoon or mid-day runs leaving <u>from</u> school:
 - (1.) Continue on route, if safe, or
 - (2.) Continue to the next pick-up school and stop, **or if too dangerous:**
 - (3.) Proceed to the nearest mass care facility. (Listen to your AM-FM and two-way radios for information) **or**
 - (4.) Proceed to the nearest school.
- 5. If you decide **not** to continue driving and **not** to evacuate:
 - a. Stay with passengers. Notify dispatcher, if possible. Monitor your AM-FM and two-way radios.
 - (1.) Calm and reassure passengers.
 - (2.) Tend to their needs.
 - (3.) Set out reflectors as required by law. (See Appendix E)
 - (4.) Wait until help arrives, or the emergency is over.
- 6. If you decide evacuation is required, notify dispatcher, if possible, then remove ignition key and:
 - a. Communicate to students during the evacuation from the bus.
 - b. Determine which emergency exit(s) will be used and direct/assist ambulatory students from that exit(s) to a safe regrouping area.
 - (1.) The dispersal (regrouping) area should be up-wind of any fire.
 - (2.) The dispersal (regrouping) area should be at least 100 feet from the bus, if possible.
 - (3.) The driver may have to conduct the evacuation from outside the bus.
 - (4.) Send the first-aid kit with the group.
 - c. If a paraprofessional is riding, have him/her assist by releasing the tie-downs or other securement for all passengers.
 - (1.) Have the paraprofessional move the wheelchairs/car seats/students to the proper emergency exit.
 - (2.) If alone, release the tie-downs and/or other securement and move the wheelchairs/car seats/students to the appropriate emergency exit.

- (3.) If the wheelchair lift is not operable, remove the students from their wheelchairs/car seats and place them by the appropriate emergency exit, then carry them off the bus to the dispersal (regrouping) area. (Get assistance from the paraprofessional, or a passerby if available.)
- d. Retain the passengers in the dispersal area, or a safer area if available. If you move your group, try to notify dispatch.

WARNING

In case of <u>fire on the school bus</u> remember that fire goes up and out normally. Crawl low in smoke and heat. There may be a <u>maximum of two minutes</u> before the <u>smoke</u> becomes <u>too toxic</u> to breathe. All students should be physically removed from their wheelchairs/car seats/bench seats, carried to the exit and passed on to a person outside the exit. If possible, carry one student under each arm. Wheelchairs and car seats can be replaced and students' bodies can be treated, but students cannot always be brought back to life.

- (1.) Wait there until:
 - (a.) A spare bus arrives.
 - (b.) An emergency vehicle arrives.
 - (c.) It is safe to return to the original bus.
- e. Obtain or write down the following passenger information: (use route manifest and make notes on it.) Also use forms seen in Appendices D and E.
 - (1.) Names
 - (2.) Addresses
 - (3.) Phone numbers
 - (4.) Note any injuries
 - (5.) Route information
 - (6.) Name of emergency transportation, if required
 - (7.) Where student(s) were transported to or who released to.
- f. Release students **only** to:
 - (1.) Parent or guardian
 - (2.) School staff, site manager, or transportation official
 - (3.) Mass care coordinator
 - (4.) National Guard
 - (5.) Representatives of the National Red Cross
 - (6.) Police, sheriff, fire department
- 7. Report to the nearest school if all children have been properly released, and notify transportation department of your location.

- 8. In all cases, follow directions as given by:
 - a. Transportation department dispatcher/supervisor
 - b. Local authorities
 - c. Office of disaster preparedness

EVACUATION PROCEDURES FOR ACTIVITY TRIPS AND FIELD TRIPS

In order to ensure the safety of school bus passengers in an actual emergency, every school bus driver assigned to transport students on activity trips or field trips should assign an evacuation team prior to each trip. The team may consist of teachers, coaches, students or any other passengers. Remember that walkers may at times ride a school bus on field and activity trips and should receive ridership training.

Passengers assigned to evacuation teams must be seated where they can effectively carry out their responsibilities in an emergency.

Each evacuation team should consist of at least the following:

- 1. A passenger assigned to set the parking brake, turn off the engine, turn on the hazard lights and call in on the radio or other means, and report the incident to the transportation department, in case the driver is unable to do so.
- 2. A passenger assigned to lead passengers to a safe location at least 100 feet from the bus and to take the first aid kit off the bus.
- 3. Two passengers assigned to stand outside the bus, next to the front door to help students exit the bus and to take the fire extinguisher.
- 4. Two passengers assigned to stand outside the rear and/or side emergency exit door(s) to help students exit the bus.

In addition to assigning an evacuation team, the following information should be discussed and/or demonstrated prior to each activity trip or field trip:

- 1. Location and use of the fire extinguisher.
- 2. Location of the first aid kit.
- 3. Location of the warning reflectors.
- 4. Location and use of all emergency exits.
- 5. How to shut off the engine and set the parking brake.
- 6. How to open the front door, to include safety releases on manual, air, or vacuum doors if so equipped.
- 7. Instruct passengers to keep aisles clear at all times and not to block emergency exits.
- 8. Passengers should leave all belongings and get off the bus.

IF THE HANDICAPPED PUPIL IS IN A WHEELCHAIR

Exercise caution: some pupils have catheters or are tube fed. The hoses or tubes have to be anchored somewhere and sometimes are anchored to the wheelchair. If straps are severed and the pupil is pulled from the wheelchair to evacuate them, any bodily (including internal) hookups to the pupil are likely to be ripped from the body and possibly cause severe internal problems.

BUS DRIVER PRESENTATION (SUGGESTED)

It is a pleasure	to be the bus driver for this trip. My name is I	Mr./Mrs./Ms I work
for	bus line/school district.	

We all know that a school bus is the safest means of transportation available. Emergencies do happen though, so I want to remind you of the procedures that you and I must follow in the event of an emergency.

School buses have only been evacuated on a few occasions, but if it does become necessary, each student must know what to do. I will appreciate it very much if you pay close attention to what I have to say in the next few minutes.

If it becomes necessary to evacuate the bus you will follow these rules:

You should remain seated and quiet until the bus is completely stopped. Do not change seats unless instructed to do so by the teacher or myself. You should face forward in the seat, and keep your hands, feet and head away from the windows and inside the bus at all times. You should be courteous to others and pay attention to the bus driver, teacher and evacuation helpers.

When you are moving to the proper emergency exit, do not push or shove. While leaving the bus please use the handrails or the evacuation helpers' hands. Be on the lookout for traffic and/or pedestrians. Walk directly to a safe area and remain there with your group.

Be sure you move away from the front, sides, or back of the bus. These are all areas where you cannot be seen from inside. If the bus was moved while you were standing in one of these areas, you could be seriously injured or killed. These area are called the danger zones. So remember to stay away from the danger zone areas.

NOTE 1

At this time you should appoint the evacuation helpers and leader. You have had time to evaluate the riders. Pick the older more mature students. Assign their positions.

NOTE 2

The following presentation will vary with the type of bus and number of exits to be evacuated. Keep it simple. Use the evacuation guides in Appendix F.

NOTE 3

If chaperons or teachers are on the field or activity trip, they should be assigned to areas where they could be the most help in the event of an emergency.

If an emergency situation happens, I will direct the assistants to their positions near the emergency exit door. I will then ask an assistant to open the emergency door exit, and jump out to his/her position. I will then have the next assistant jump out to stand on the other side of the door. The evacuation leader can then be helped out (if possible, take the first aid kit) and will lead the other students about 100 feet (50 paces) from the bus, where all the passengers will regroup.

The last passenger to leave the bus by the front door will pick up the fire extinguisher (if possible) and join the group. The fire extinguisher and the first aid kit are located

The evacuation leader will help you with any problems when you join the group. Please walk to the regrouping area and remain there quietly until everyone has evacuated the bus.

Are there any questions? Thank you for your attention. I'm glad to have such a great group of riders. I know if anything goes wrong you will be able to handle it. Enjoy your ride.

LOCAL DISTRICT POLICY

Bus staff should be familiar with local district policy regarding:

- 1. Evacuation procedures to follow when enroute and a tornado is sighted, with no shelter near.
- 2. The type of medical information to be available on long distance trips in case of student injury.

NOTE

The safety of the bus and equipment is secondary to the safety of the students. No attempt should be made to save equipment or personal items until all students are removed from the bus, safely out of danger, and supervised.

ACCIDENT PROCEDURES

No two accidents are the same. The sequence suggested here may not be the same for every accident. Good common sense must be used.

The drivers primary responsibility is to the pupil passenger. Therefore, it is the driver's responsibility to remain calm. If the driver is unable to physically perform his or her duties, he/she should direct others to do them. Should this be the case, ask the oldest and most capable passengers(s) to help.

The following procedure is recommended:

- 1. Turn off the ignition switch.
- 2. Set the park brake.
- 3. Remain calm and reassure your passengers.
- 4. Check for any injuries to passengers:
 - a. If passengers are injured, follow first aid procedures and summon assistance.
- 5. Be alert regarding fire or the possibility of fire:
 - a. Look for smoke
 - b. Check for ruptured fuel tank and fuel lines
 - c. Check for electrical fire
 - d. Check for hot tires which may catch fire
- 6. Use warning devices such as reflectors or fusees where applicable. (Appendix B for positioning)
- 7. Keep all passengers in vehicle unless conditions warrant the possibility of fire, hazardous material spill or other danger which may warrant evacuation.
- 8. Account for <u>all</u> passengers: their presence as well as injury status.
- 9. Notify the dispatcher if you have a radio so that necessary assistance from police, fire, ambulance or rescue personnel may be obtained. If the school bus is not radio equipped then the alternative measure is to seek the assistance of an older, competent pupil passenger, a passing motorist or a resident of the area to call for help.
- 10. If possible, notify the school administration or transportation department of the accident.
- 11. Protect the scene:
 - a. Protect the passengers and the vehicle from further accidents and injuries.
 - b. Protect the scene from traffic and people so that evidence is not destroyed.
 - c. Under normal circumstances, the vehicle(s) involved should not be moved until law enforcement personnel advise the driver to do so. (Check local laws on this)
- When police, fire or emergency personnel arrive, they are in command of the scene. The driver does not maintain control over the scene of the accident. The driver should focus control over the pupil passengers.

- 13. Do not discuss the facts of the accident except to give information to police, fire and rescue personnel, and to transportation officials:
 - a. Be prepared to provide a list of all passengers, ages, addresses and seating positions.
 - b. Give information about the school bus, insurance, owner and driver data. An emergency packet should be carried on the school bus and should include the registration information, emergency phone numbers, and any additional directives covering this subject.
 - c. Be patient, evaluate the questions and give clear concise answers.
 - d. Be sure to obtain the names, addresses and license numbers of any witnesses.
- 14. Follow any other directives issued by state or local school districts in the event of an accident.

At the scene of an accident involving property damage, injuries, fire or hazardous materials [haz mat] such as leaking fuel, the incident commander has full responsibility for managing the scene. This will be the senior fire, emergency medical service or police officer. The school bus driver is not the incident manager, but is in charge of the pupils. The police have the responsibility for investigating the cause of the accident, for providing safety to scene workers and for directing traffic. If rescue operations are on the scene, they handle the emergencies under their authority.

One of the big dangers when involved in an accident is to allow the passengers to get out of the school bus and mill around the scene or on the roadway. If you have to evacuate the bus because of fire danger or other reasons, be sure the passengers are moved to a safe location off the roadway and kept under control until you are given further instructions from an officer or school operation administrator.

EMERGENCY RESPONSE

PREFACE

School buses traverse our roads during peak traffic times, during the week, around sunrise and sunset. We compact large numbers of pupils into single vehicles. Buses are National School Bus Yellow (bright yellow) in color, have a lot of flashing lights, include stop arms on most, and are highly visible. They transport approximately 22,000,000 pupils almost 4 billion miles, 180 school days per year, at a cost of \$7.5 billion.

The school bus actually has a very low accident ratio compared to the miles traveled. But - when there is an accident, the potential for major problems is present.

Emergency responders must read this whole manual, even the first part for school bus operations to fully understand what they are facing. School buses are vastly different from years ago, before 1977, when the federal government mandated certain safety measures in the construction of school buses. We suggest that EMS and police should be aware of the bus routes in their jurisdiction so that pre-planning is done. Some routes could have mountainous terrain, while others have quarries or other pits full of water. Specialized equipment must be planned for.

There are questions of authority and responsibility at the scene for accidents and incidents pertinent to your jurisdiction. It is not the intent of this manual to define or defy jurisdiction between police, fire, rescue and ambulance operations. Those questions and answers are left to local authority rules, regulations and policy. Those answers may be added to this manual or under separate cover. There should be no jurisdictional questions at the scene of the accident or incident.

Since police are normally the first responders to the scene of an accident, an additional burden is squared upon their shoulders. All of the fire, police and EMS training cannot prepare people for a potential accident of this magnitude. Anywhere from just a few pupils upward to 80 or 90 could be on the school bus. The bus could be used for home-to school-to home transportation or used by Scouts or churches that do not conform to state vehicle policy. That means there are buses on our roadways that look like school buses, are the same color and general description, but are not legally school buses. All the bus owner has to do in most states is cover the words "School Bus" on the front and rear, take off the stop arm and either remove or cover the lighting system at the top of the bus on the front and rear.

The school bus is many times safer than the family car, according to the National Safety Council. The reasoning underlying that statement is the configuration of the school bus itself. It is built to grant the passenger a form of a passive restraint system. This compartmentalization theory is borne by the fact that, even though the accident ratio is far

less than most highway user vehicles, when the school bus is involved in an accident, injuries typically are not as severe.

The school bus today has higher seat backs, and the seats are close together. Couple that with the narrow aisles. The fact that the windows are normally above the shoulder and do not open from the bottom half. Unlike the automobile, the passengers are not close to a windshield, steering wheel, door opener mechanism, or the door. Even the front seat passengers have a padded modesty panel or stanchion in front of them. Seat belts are not used in most states. The seat belt actually would be more dangerous than no seat belt. If wearing a seat belt in a collision, the passenger would have his/her upper torso go forward while his/her hips would be an axis held by the seat belt. The forehead could strike the back of the seat in front and cause the neck to snap back. According to the American College of Orthopedic Physicians, the striking of the forehead would cause more trauma than the whole body sliding forward a short distance and the impact into the cushioned back of the seat in front of the passenger would be absorbed by the knees, chest and head in a straight forward motion. The pounds per square inch (psi) would be distributed over a greater portion of the body than just the forehead. Shoulder harnesses cannot be used because there is no place to attach the upper portion of it.

The large school bus is built higher from the ground than an automobile. The normal point of impact for an automobile striking a school bus from the side would be at or below the bus passengers feet.

The tempered or laminated glass used in the windows (front, side and rear) will not break easily. This serves to reduce injuries, which might be caused by glass.

The school bus is bright yellow (National School Bus Yellow) with black trim. It has an eight-light warning system (a minority of states only require a red four-light system) which flashes four large yellow lights approximately ten seconds before the stop and flashes four red lights when the bus has stopped. Many states have also adopted the stop arm. This stop arm is a stop sign, which may have flashing red lights. It swings out from the left side of the bus at about automobile driver eye height to warn drivers not to pass a stopped school bus.

Many states or local school authorities place the international handicap blue wheelchair symbol on the exterior of the rear emergency door on school buses equipped with a lift. These school buses make longer stops when picking up pupils in wheelchairs. This symbol allows the motorists behind the school bus to know why the longer stop is being made. It takes five minutes or longer to allow the bus driver and paraprofessional (if there to assist), to exit the bus, open the lift door, lower the lift, load the wheelchair, secure both the pupil and the wheelchair in the bus and be ready to proceed on the route. When feasible, these lift-equipped school buses do not interfere with on-going traffic, but in some instances it is unavoidable because door-to-door stops at residences are required. Be aware that most wheelchairs are collapsible in that they fold in the center. Footrests are detachable, as are other items of equipment on the wheelchair. Inspect a wheelchair as part of your training.

Emergency services personnel should be made aware of the construction of the school bus. Hydraulic rescue tools will not work at every place on the roof of a school bus due to the cross-member construction, for example. The International Fire Service Training Association (IFSTA) Manual, <u>Principles of Extrication</u>, has devoted Chapter 6 to extrication from school buses. It is an excellent resource for emergency rescue operations and should be required reading for police, fire and rescue personnel.

PRE-PLANNING

The most important element in handling a school bus emergency is proper pre-planning. This pre-planning is the responsibility of everyone who may be involved. The bus owner, driver, emergency rescue personnel, all have distinct roles but must work together to bring an accident or incident to a successful conclusion.

During an emergency, state emergency medical services (EMS) and fire departments must have practice drills to increase survivability of the pupils and to provide resources for rescue operations. The more the emergency response personnel know and understand about school bus operations, the easier it will be to handle the emergency. At the same time, the more the bus driver and/or paraprofessional understand about what the emergency response personnel will do and require, the easier it will be to work together when the emergency occurs.

The only way for everyone to successfully work together is to establish positive communications. This sharing of knowledge will enable everyone involved to react effectively and efficiently during the emergency situations.

The following items have been identified as critical. Everyone involved must be aware of and know how to handle them. This is the information that must be shared with all emergency responders to ensure proper pre-planning and response to a school bus accident or incident.

ACCIDENT/INCIDENT COMMAND

At any emergency scene someone is in charge. Every state has their own policies, laws and guidelines. The role of accident/incident commander must be established and understood by everyone prior to the emergency. It is suggested that the local officials, police, fire and emergency medical service, as well as the bus owner or operator, meet and discuss this issue. In some areas it may be clearly established and understood. The incident commander should:

- 1. Assume control of the scene.
- 2. Direct all rescue/fire operations.
- 3. Co-ordinate all communications.
- 4. Establish crowd control.
- 5. Establish safety zones.

Should the jurisdiction decide these duties are divided, then who handles what areas must again be decided and agreed upon prior to the emergency.

BUS FUEL SYSTEMS

Fire is a major concern at any vehicle accident. Proper fire control and safety precautions will be influenced by the type of fuel a school bus uses. The driver and emergency response personnel must be familiar with the fuel and fuel systems.

The following are considerations for pre-planning purposes:

- 1. Type of fuel:
 - a. Gas
 - b. Diesel
 - c. Propane
 - d. Compressed natural gas (CNG)
 - e. Methanol
- 2. Location of fuel tanks
- 3. Emergency shut-off systems
- 4. Special markings or features that denote a particular type fuel system.

EVACUATION PROCEDURES (Appendix F)

Local policies will determine when and how students are evacuated from a bus. School bus evacuations must be practiced with the students. Emergency response personnel must also be familiar with these policies, procedures and techniques. School buses carry a variety of students varying in size, age and special needs. The number of students a bus will carry also varies depending on these factors. Important considerations that should be shared are:

- 1. What determines when students will be evacuated?
- 2. How the evacuation is carried out, front, rear or side emergency exits; roof vents or windows used as emergency exits.
- 3. Distance students are removed from the bus.
- 4. Security of the evacuated students in the regrouping area.
- 5. Inclement weather considerations.
- 6. The role of the student in obtaining help.
- 7. Student accountability. (Appendix D)

Evacuation is a very difficult situation. Consideration must be given that the <u>safest place</u> <u>for the students may be on the bus.</u> School buses do not have seat belts. This is one less problem about which the emergency responder has to worry. However, special education buses will have special restraining devices with which the emergency responder and driver must be familiar.

RESTRAINING DEVICES (Appendix C)

The mainstreaming of special education students into the general population has generated new transportation problems. A major concern for everyone is restraining devices. Due to the varied nature and condition of the students, the types of restraining devices will vary. The driver and emergency responders must be aware of the following:

Types of devices:

- 1. Harnesses.
- 2. Wheelchair tie-downs.
- 3. Other special devices.

How devices operate:

1. Methods of release.

EMERGENCY RELEASE GUIDELINES

Certainly the safest way to remove a student is by releasing the device under normal operating procedures. However, during an emergency situation, time may not permit this to be done. The fastest way to release the student may be to cut the restraining device. Plans and provisions should be made for everyone involved including the driver to carry a cutting device such as a seat belt cutter for emergency use. Remember, during an emergency the

key factor is the safety of the student and we are not concerned about any damage that may occur to the restraining device. The local emergency response personnel should be trained in the types of devices used and normal and emergency means of removal.

SPECIAL MECHANICAL EQUIPMENT

Buses designed to carry students with special needs present certain distinct problems for the driver, as well as for the emergency response personnel. These buses are equipped with and carry special devices to make the handling of the special needs student easier. A general overview of restraining devices has been covered. In addition, consideration must be given to specialized mechanical devices on the buses. These include:

- 1. Hydraulic lifts
- 2. Electric lifts and controls
- 3. Battery-operated devices
- 4. Wheelchairs (Appendix H)
 - a. battery packs
 - b. oxygen bottle equipped
 - c. special restraining equipment

Buses with wheelchair capabilities normally have a lifting device to facilitate the loading and unloading of students confined to wheelchairs. These devices may operate after an accident or other emergency or may totally fail. Everyone must know how these devices operate. Emergency response personnel should be instructed in the use of these devices. Any specific override features or manual operating features should be explained. Everyone must be aware that any device that is operated by a hydraulic system poses special problems. Hydraulic lines operate under high pressures. Should one of these lines rupture or break loose, anyone may be injured by spraying fluid or a wildly whipping line. Everyone should be made aware of the type of hydraulic fluid used and any potential health or fire hazards it may possess. Also hydraulic cylinders may rupture when exposed to heat or fire. Methods of safely approaching these areas need to be considered.

Electric lifts and controls must not be overlooked. How they operate is certainly a concern. Everyone should be made aware of how they are tied into the buses electrical system, manual disconnects or specific override capabilities. If these devices have a separate battery, consideration must be given to its location and means of disconnecting should the need arise.

OTHER EQUIPMENT ON THE BUS

The school bus carrying special education pupils presents unique devices and hazards not generally known to police and fire personnel. As we move further into special needs transportation, especially of the medically fragile, we will be transporting more life support systems and other medical equipment. All of this equipment must be adaptable to tie-down devices so that it can be secured. To rescue or move these pupils, this equipment must go with the pupil. Special attention must be paid to oxygen support, ventilators, etc., as

rescuers proceed to do their job. The school bus driver and bus paraprofessional will provide valuable assistance to rescue personnel.

In most states the international blue handicap symbol sticker is not displayed on these special needs buses. Ascertain the requirements in your jurisdiction.

Some school buses will have emergency exits outlined with reflectorized materials to assist emergency responders in easy identification of those exits.

ASSISTANCE

To handle any situation or emergency, help must be obtained. This may be done by flagging down a passing motorist to call for help, using a two-way radio, or sending an authorized student to a nearby house or office to make a call. The key issue is who to call. A suggested solution would be for every driver to carry a couple of 3"x 5" cards with the following information:

- 1. Bus route and bus number
- 2. Telephone number for transportation office
- 3. Telephone number for fire, police, ambulance
- 4. Bus driver's name

This card could be given to the person sent to obtain aid with instructions of who to call and the type of assistance needed. Remember, every driver must be familiar with the local policies for obtaining aid. If a policy does not exist, one must be developed.

POLICE, FIRE, AMBULANCE AND RESCUE OPERATIONS RESPONSE

It is not the job of the bus operator to determine the type of response or the amount of equipment that police, fire, and EMS may send to an emergency involving a school bus. It is the responsibility of the school district, transportation supervisor or driver/operator to help local emergency response personnel plan for a coordinated response. Meetings with local emergency response personnel, including hospital personnel or trauma teams, should be scheduled. These meetings should be a learning experience for both groups. Emergency response personnel need information to adequately plan. The following items are helpful:

- 1. Number of buses that run in the district
- 2. Types of fuel systems used
- 3. Any special needs students and/or buses
- 4. Bus capacities
- 5. Evacuation procedures/policies
- 6. How to notify school officials during an emergency
- 7. Types of restraining systems used
- 8. Any special medical needs that may arise

May 2001

The emergency response personnel should be able to provide the driver/operator with an overview of what the response will consist of in terms of equipment, a general operations plan and an identified chain of command. This plan can then be incorporated into the schools' and operators' plan.

VEHICLE EVACUATION

In the event of an actual emergency, the decision to evacuate the school bus is the initial step and one of the most important that the driver will have to make. That decision will initiate a chain of events to result in the safest possible situation for the passengers under the existing circumstances. The decision must be made as quickly as possible and based on all the facts at hand.

We must train ourselves and the passengers to do the following:

- 1. Do not panic.
- 2. Follow instructions.
- 3. Have an interest in the safety of others.
- 4. Know how to operate all emergency exit doors, windows and other escape hatch releases.
- 5. Have the passengers able to perform an evacuation with driver assistance. Through effective training, experience with critical situations reduces the emotional impact and increases the chance of making the correct responses. Drivers and passengers can improve their responses. Through effective training we find that:
 - 1. Thinking reduces panic.
 - 2. Ability depends upon conditioning (training).
 - 3. Knowledge and practice reduces surprise.
 - 4. "What if" situations are excellent practice.
 - 5. Repetition reduces surprise.

A vehicle should always be evacuated when, but not limited to:

- 1. Fire is present.
- 2. Potential for a fire due to:
 - a. Ruptured fuel tank or fuel line.
 - b. Electrical fire due to damaged insulation, loose connections, or electrical line near the school bus.
 - c. Hot tires, due to under-inflated tires and duals that touch each other.
 - d. Hot brakes, due to excessive use on a downgrade, causing linings to overheat and ignite lubricant.
- 3. The bus is situated in a dangerous position upon the roadway, such as:
 - a. On a curved portion of roadway
 - b. On railroad tracks
 - c. Close to a roadway under adverse atmospheric conditions.

In emergency situations expedient and orderly movement of people contributes to safety. This movement can be accomplished by understanding and practicing recommended evacuation procedures. Both the driver and the passengers should know what to do in the event of an emergency.

EMERGENCY EQUIPMENT ON SCHOOL BUSES

There are various types of emergency equipment required to be maintained on school buses. Check your own laws, policies or regulations to see which equipment is required in your state or district.

The National Standard for School Buses and National Standards for School Bus Operation, 1990 revised edition, set forth recommendations. They are as follows:

1. Fire extinguisher (Appendix A)

- a. The bus shall be equipped with at least one pressurized, dry chemical fire extinguisher complete with hose, to meet Underwriters Laboratories, Inc., approval. Extinguisher must be mounted in a bracket, located in the drivers's compartment and readily accessible to the driver and passengers. A pressure gauge shall be mounted on the extinguisher and be easily read without removing the extinguisher from its mounted position.
- b. The fire extinguisher shall be of a type approved by Underwriter Laboratories, Inc., (see Appendix A) with a minimum rating of 2A10-B:C or greater. The operating mechanism shall be sealed with a type of seal which will not interfere with the use of the fire extinguisher.
- c. Special education buses with wheelchair lifts are required to have a second fire extinguisher mounted in the rear of the bus convenient to the wheelchair lift and exit. This extinguisher must meet all the requirements of the previously described fire extinguisher.

2. First aid kit

a. Each school bus shall have a removable, moisture-proof and dust-proof first aid kit mounted in an accessible place within the driver's compartment. This place should be marked to indicate its location.

b.	<u>Passengers</u>	<u>Units</u>

1 - 16 10 unit kit 17 - 42 16 unit kit 43 and above 24 unit kit

c. Suggested contents include:

- 2- 1" x 2 1/2 yards adhesive tape rolls
- 24- Sterile gauze pads 4" x 4"
- 100- 3/4" x 3" adhesive bandages
- 8- 2" bandage compress
- 10- 3" bandage compress
- 2- 2" x 6' sterile gauze roller bandages
- 2- non-sterile triangular bandages approximately 40" x 36" x 54" with 2 safety pins
- 3- sterile gauze pads 36" x 36"
- 3- sterile eye pads
- 1- rounded-end scissors
- 1- pair latex gloves
- 1- mouth-to-mouth airway burn sheet multi-trauma dressings

d. Body fluid clean-up kit

Each bus should have a removable and moisture proof body fluid clean-up kit. It shall be properly mounted and identified as a body fluid cleanup kit.

e. Warning devices (Appendix B)

Each school bus shall have at least three (3) reflectorized triangle road warning devices mounted in an accessible place in the driver's compartment. All reflectors shall be maintained in good working order. The driver, paraprofessional or other capable passenger should be instructed in the proper use of these warning devices. (see Appendix B)

EMERGENCY EXITS

School buses should have standards as far as emergency exits are concerned and basically they do. FMVSS 217 is in a constant state of revision as far as safety standards. The members of the Eleventh National Conference on School Transportation proffered to the National Highway Traffic Safety Administration (NHTSA) the following standard for adoption both by the NHTSA and the states:

1. Type A, B, C, and D vehicles shall be equipped with emergency exits in the following capacity vehicles:

0 - 22 passengers: one emergency exit per side and one roof hatch

23 - 65 passengers: one emergency exit per side and two roof hatches

66 and above: two emergency exits per side and two roof hatches

Each emergency exit shall comply with FMVSS 217. These emergency exits are in addition to the rear emergency door or exit.

In addition to side and rear emergency exits, doors, or windows, one or more roof hatches may be installed, provided they meet all requirements specified in FMVSS 217.

ROOF VENT/EMERGENCY ESCAPE HATCH

The potential need for roof exits is easily demonstrated by imagining a school bus accident where the bus is lying on its right side. The service door is blocked. The right side windows are on the ground. The rear emergency door provides the only feasible escape route. Of course the windshield can be broken out but in the time of emergency this route may not be chosen. Smashing out windows requires the use of an axe or using the fire extinguisher as a battering ram - no easy feat. It would also leave a broken glass littered opening through which the passengers must crawl to reach safety. If an engine fire is involved, the windshield route may be blocked. Add to this the possibility that the rear emergency exit door could be jammed due to rear-end collision or jammed due to the twisting motion of the bus rollover and we have a dilemma. The left side windows are now high in the air, too high for most pupils to reach. Does this sound far-fetched? It could happen. The front and rear windows are designed to be pushed out from the inside of the school bus.

The roof vent/emergency escape hatch provides additional passages to safety. The police, fire and rescue operations must be aware of these hatches and their potential escape network.

Oddly enough, many of these roof vent/emergency escape hatches do not come equipped with exterior release mechanisms. The outside release is an option.

These vents have rugged construction specifications and are made of high strength plastic or fiber glass. If there is not an exterior release mechanism and the passengers do not respond to unlocking the vent, it can be pried or broken through.

Instructions to passengers by rescuers are simple:

- 1. Push the vent open and release the safety lock.
- 2. Push the release handle and open the cover.

The vent opening is normally about 23 inches by 23 inches, enough for full-sized adults to exit. Vents are simple enough for children to operate. Hand pressure opens the vent. The emergency exit includes a safety latch to help prevent accidental openings, however, this could hinder rescue operations. Know that the safety latch is there when the hatch is opening to the vent position.

An additional option on these vents is an alarm switch. This activates a warning light or buzzer to warn the driver when the vent is opened to the emergency exit position.

The first responder who comes to an accident scene involving a school bus may find a great number of pupil passengers. While the configuration of the school bus tries to minimize potential injury, you face the possibility of 40 to 90 pupils aboard the school bus. The stock and trade school bus nation-wide is the 66 passenger school bus. It carries up to 66 elementary pupils assigned three to a seat, or on this same bus, it will carry up to 44 passengers in a two-to-a-seat assignment. A school bus, however, can be anything from a small van conversion up to a 90-passenger coach-type school bus.

As might be supposed, the bus may just be starting the route or be full, ready to make delivery. The injuries may be minor in nature or serious. The need to move the injured could present a challenge by virtue of the numbers involved. The school bus might contain handicapped pupils who can do little for themselves and/or be in wheelchairs. Wheelchair-bound pupils will be belted into their wheelchair and the wheelchair itself must be affixed to the floor usually by straps. Most buses carry belt-cutting knives. If fire is present, leave the wheelchair. There are a number of films and manuals that deal with the evacuation of special needs and wheelchair pupils.

OPERATION SCHEDULE

Accidents involving school buses normally are restricted as to day of week, time of day and season of the year. The norm is an operation that is Monday through Friday. It begins around 6:30 a.m. ending at 9 a.m. It starts again around 2:00 p.m. and ends around 5:00 p.m. Schools open the day after Labor Day in September and, with major holidays and a spring break excepted, run for approximately 180 days to mid-June.

A little outside the public conception of normal school opening and closing are a whole host of extra-curricular activities, field trips and alternative scheduling. A major impact not

usually considered in "regular" school times is special education or the special needs schools. Due to smaller class size and a variety of eleven handicapping conditions, these pupil's day starts earlier and in many instances runs later because they are bused further. Many times special needs pupils are in school longer than 180 days. In fact, many of the special schools run throughout the year. The school bus runs at peak traffic time on every conceivable street, road and highway, in urban and suburban areas.

School bus drivers are professionals. They must now have the Commercial Drivers License (CDL). Every state has some form of school bus driver training on top of that, which includes first aid, pupil discipline, defensive driving and school bus emergencies, to name a few subjects.

SPECIAL ASSESSMENTS

The first responder must quickly assess the needs of other persons or apparatus for this accident or incident. The involvement of a school bus automatically triggers a lot of concern and potential need for a lot of help. Topping the list of considerations for assistance are:

- 1. Rescue, fire and ambulance.
- 2. Additional police to secure the scene.
- 3. Another school bus to shuttle pupils.
- 4. Highway department.
- 5. School administrators.

NOTIFICATION

As soon as the scene is stable and the injured are taken care of, concern must shift to persons or agencies to be notified of the accident. School bus accidents always generate a lot of interest from the news media. To handle this aspect, the police public information office should respond because the investigator will not have the time or inclination to handle media relations until the investigation is complete.

School administrators should be notified immediately upon confirming that there is an accident, be it property damage, personal injury or a fatal accident. They will, in turn, deal with the parents of the pupils involved and other school personnel and keep that portion out of police hands.

The police officer must work hand in hand with the other respondents to the accident scene. In many jurisdictions, the callboard or central dispatch handles these preliminary notifications. Police, however, cannot assume that the dispatcher will make notification. Assistance with the pupils, even if they are not injured, will be needed immediately. The school bus driver is the first line of support in this area of concern. Police should rely upon the professional school bus driver who has received some training in first aid, school bus evacuation and pupil management.

May 2001

INVESTIGATION

It is not the purpose of this manual to tell the police how to investigate an accident or incident involving a school bus.

Interviews and evidence are handled the same as any accident or incident. The only potential difference is in the magnitude of the situation. Many more people are involved at the scene and in the notification. School authorities will respond to the scene to assist. Please accept the offer of assistance as they too are professionals and have dealt with these matters before. School authorities are not there to take over the police investigation. The pupils' interests are paramount in their minds as well as in those of the police rescue personnel.

As part of the police investigation it may be helpful to know that the school bus drivers are professional drivers. Not only have they obtained the Commercial Drivers Licenses (CDL), effective April 1, 1992, they will also have gone through extensive driver training on the school bus itself. Most states also demand inservice or yearly follow-up driver training as well.

May 2001 C-31

APPENDIX A

CLASSIFICATION OF FIRES

Accepted standard practices separate fires into four general classes as follows:

- 1. <u>Class A.</u> Fires of ordinary combustible materials where the "quenching" and "cooling" effects of quantities of water or of solutions containing large quantities of water are of first importance. Examples are fires in wood, textile fabric, rubbish, etc., or any material that leaves an ash.
- 2. <u>Class B.</u> Fires in combustible liquids, petroleum products, etc., where the blanketing or "smothering" effect of the extinguishing agent is of first importance. Examples are gas, oil, and grease fires. These substances may be stored in tanks, containers, or open vats; or they may be running freely on the ground.
- 3. <u>Class C.</u> Fires involving electrical equipment where the use of a "nonconductor" extinguishing agent is of first importance. Examples are fires involving electrical switchboards, motors, or wiring.
- 4. <u>Class D.</u> Fires involving flammable metals (magnesium).

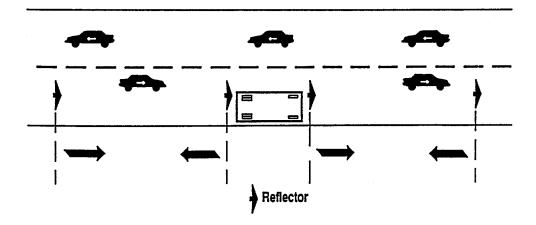
Vehicles should be equipped with extinguisher(s) to provide the minimum rating required; 2A10-B:C means large enough to extinguish a fire of B:C class covering ten square feet of surface. (Standards indicated by National Fire Protection Association)

The most commonly used fire extinguisher is the dry chemical type.

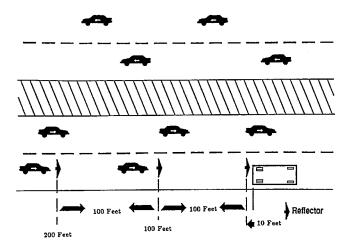
APPENDIX B

RED EMERGENCY REFLECTORS

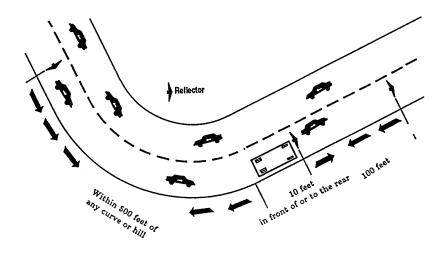
- 1. Every vehicle, if operated during darkness, would be subject to the provisions of your state's motor vehicle code. Every school bus may be required to be equipped with at least three red emergency reflectors. All reflectors shall be maintained in good working conditions.
- 2. When any such vehicle is disabled on the roadway during darkness, reflectors should be immediately placed as follows:
 - a. One at the traffic side of the disabled vehicle, not more than 10 feet to the front or rear thereof.
 - b. One at a distance of approximately 100 feet to the rear of the disabled vehicle, in the center of the traffic lane occupied by such vehicle.
 - c. One at a distance of approximately 100 feet to the front of the disabled vehicle, in the center of the traffic lane occupied by such vehicle.



d. If a disablement of any such vehicle occurs within 500 feet of a curve, crest of a hill, or other obstruction to view, the driver shall so place the reflectors in that direction as to afford ample warning to other users of the highway, but in no case less than 100 nor more than 500 feet from the disabled vehicle.



e. If disablement of the vehicle occurs upon any roadway of a divided or one-way highway, the driver shall place one reflector at a distance of approximately 200 feet and one reflector at a distance of approximately 100 feet to the rear of the vehicle in the center of the lane occupied by the stopped vehicle, and one reflector to the traffic side of the vehicle, not more than 10 feet to the rear of the vehicle.



- 3. When any such vehicle is disabled or parked off the roadway but is within 10 feet thereof during darkness, the driver shall immediately place warning reflectors as follows:
 - a. One at a distance of approximately 200 feet to the rear.
 - b. One at a distance of approximately 100 feet to the rear.
 - c. One to the traffic side of the vehicle, not more than 10 feet to the rear of the vehicle.
 - d. The reflectors shall, if possible, be placed between the edge of the roadway and the vehicle, but in no event less than two feet to the left of the widest portion of the vehicle or load thereon.

APPENDIX C

WHEELCHAIR INSPECTION PROCEDURE

IS THE WHEELCHAIR SAFE TO TRANSPORT?

1. FRAME

The following items should pertain to the wheelchair frame:

- a. It must be maintained by the owner.
- b. Should not have any major indentations, cracks, depressions or abnormal signs of wear or strain.
- c. Should be fastened together to meet manufacturers specifications.

2. BRAKES

All wheelchairs transported should have brakes. The following items pertain to the brakes:

- a. Properly maintained by the owner of the chair.
- b. Electric wheelchairs should be capable of being locked in gear or have an independent locking system.
- c. Maintained to hold the chair in place while on the lift and on board the bus.

3. RESTRAINING BELTS

All wheelchairs transported should have restraining belts. The following pertain to the restraining belts:

- a. Provided and maintained by the owner of the chair.
- b. Be of the webbed type.
- c. Belt buckles have a manual release.
- d. Fastened to the frame of the chair. (Wrapping the belt around the student and the chair is not acceptable.).

4. Batteries

The following pertain to batteries attached to wheelchairs:

- a. Maintained by the owner of the chair.
- b. Leak resistant and spill resistant container.
- c. Secured to the frame by a properly maintained battery held down in such a manner as to prevent separation in an accident. This hold down of battery should be fastened to the frame to prevent no more than 1/4 inch movement.

5. FOOTREST

Wheelchairs transported should be equipped with footrests whenever applicable. These footrests must be:

- a. Maintained by the owner of the chair.
- b. Adjusted so the students feet are able to rest on the platform.
- c. Secured firmly to the frame.

6. WHEELS

Wheelchairs transported will have wheels that should be:

- a. Maintained by the owner of the chair.
- b. Secured to the chair with no more than 1/6 inch wobble.
- c. Spoked wheels shall have all spokes. Spokes should be tightened and not broken to ensure maximum stability.

7. UPHOLSTERY

All wheelchairs transported are to be maintained by the owner to ensure that the seat and back portion of the upholstery are in good condition (no tears, sharp edges, nor excessively worn.)

8. SPECIALIZED WHEELCHAIRS

Mulholland type chairs are to have at least four supports, one being connected from each corner of the seat of the chair to the base of the framework.

9. HOMEMADE WHEELCHAIRS

Homemade wheelchairs should not be transported until approved by a major wheelchair manufacturer or licensed physical or occupational therapist. It is required that a letter from the company or therapist (on company letterhead) be submitted to the carrier to assure that the homemade wheelchair has been inspected. This letter should state that the chair does meet manufacturers' safety requirements and is safe to transport.

APPENDIX D SPECIAL EDUCATION SEATING CHART

DRIVER	DATE
ROUTE NO.	BUS NO.
DRIVER'S SEAT	
1. 4. 7.	2 3. 5 6. 9.
10. 13.	11 12. 14 15.
16 19.	17 18. 20.
22 25 28	23 24. 26 27. 29 30.

SEATING CHART SHOULD CONTAIN THE FOLLOWING:

b.	need help; <u>buddy system</u>
υ.	Location of:
	Drivers seat
	Passenger seats (numbered)
	Wheelchair stations
	All exits
	Wheelchair lift
	Fire extinguisher
	First aid kit
	Reflectors
c.	Student identification
	Helpers
	Runners
	Those who will panic
	Those who will need help
	By disability, communication, mobility (make sure a medical card
	reflects the mobility problem)
any fire. T	students to move at least 100 feet from the bus. Always regroup upwind from To assist in control, have the students hold hands, sit down in a circle, or both.
any fire. T	
any fire. T	To assist in control, have the students hold hands, sit down in a circle, or both.

APPENDIX E

EMERGENCY FACILITIES

	ROUTE 1	. O.	BUS NO.
	======	=======================================	=========
FACILITY			
		CITY	
CROSS STREET			
FACILITY			
CROSS STREET			
FACILITY			
CROSS STREET			
FACILITY			
		CITY	
CROSS STREET			
FACILITY			
		CITY	
CROSS STREET			
	FACILITY	FACILITY CROSS STREET FACILITY	FACILITY CITY CITY CITY CITY

EMERGENCY PHONE NUMBER 911

APPENDIX F

Appendix 9

TECHNIQUES FOR A BUS EVACUATION SIMULATION PRESENTATION

INTRODUCTION

School districts in all states are responsible for providing programs on safe riding practices and bus evacuation to students.

Every school year, each pupil who is transported in a school bus shall receive appropriate classroom instruction in safe riding practices and shall participate in an emergency bus evacuation drill.

We all realize that a school bus is the safest means of transportation available. School transportation personnel have earned this safety record because of a sincere regard for the safety of the passengers. In order to ensure this record is maintained, school districts provide this class to the school bus driver, so they may best understand and implement emergency bus evacuation procedures.

PURPOSE

The purpose of conducting an evacuation drill simulation is to familiarize both the driver and the passengers with the procedure to follow in the event of an emergency. On only a few occasions have school buses had to be evacuated, however, if it becomes necessary to evacuate, the bus each driver and the passengers must know the procedures.

Some districts contract for special buses and driver instructors to conduct the training of students in safe riding practices and bus evacuation. The team visits every school beginning with the first session. In addition, school bus drivers conduct a <u>simulated</u> bus evacuation drill on each field trip driven. This procedure is to prepare the driver.

The bus driver will be responsible, in the final analysis, for the success or failure for implementing the bus evacuation program.

DRIVER RESPONSIBILITY

Primarily, the school bus driver must know the subject and be able to get the message and the commands across to the passengers. This will come with some practice. Each driver should have a chance to conduct a simulated drill. It will be much easier when working with the passengers.

Secondly, a driver must know the equipment and make sure it is in good working order. For example, don't wait until the passengers are on board to find out the emergency door latch is inoperative. Make sure the fire extinguisher is properly charged and sealed, and the first aid kit has the proper units.

All school buses must provide at least two methods or routes of escape. With proper training, each passenger will know each available route of escape and how to operate each emergency exit.

As a driver be a leader, positive and sure of yourself. Appoint the ride-evacuation helpers with an eye towards responsibility and good character.

GAINING RAPPORT AND TEACHING CONTROL

The majority of the passengers will be wondering why they have to worry about school bus safety. Especially children who do not ride a bus daily, but who do participate in field trips occasionally.

This can be accomplished by using some basic teaching techniques.

- 1. Be friendly and smile.
- 2. Speak in a clear voice that all can hear.
- 3. Use your eyes. Eye contact is essential for two reasons:
 - a. Listeners feel more personal interest.
 - b. You can see if you have their attention.
- 4. Listen to the students for suggestions and complaints.
- 5. Look for and commend good qualities and actions.
- 6. Stick to the subject. If a question or comment is not pertinent, answer, "We will cover that later" or "I will talk to you later".
- 7. Know the subject. "School bus emergency evacuation."
- 8. Be enthusiastic throughout the presentation.
- 9. Use maturity and take advantage of the education and training to exercise leadership and control.
- 10. "Ascertain unerringly that the technical terminology is being used and is comprehensible and corresponds to the cultural period in human development in attendance at the lecture." Any questions? Make sure to speak to the age level of the audience.
- 11. Make the commands in a positive manner and be sure that they are capable of being carried out.
- 12. Explain the reason for the commands before having them carried out.

Let the students know that the school bus is really a good place to be and that school bus emergency evacuation is just as essential to education and personal well-being as the safety rules learned and used at the beach or swimming pool. Remember, you are helping them to grow up and the children really need to know you care about them.

BUS PREPARATION PRIOR TO THE PRESENTATION

The school bus driver is responsible for a daily bus checkout that is accomplished prior to operation. It not only is essential for the students' safety and the motoring public's safety,

but is also essential for the appearance presented to the passengers. The condition, comfort and appearance of the bus is a direct reflection on the driver and it determines the image of professionalism the driver must display. Therefore, see to it that the inside of the bus meets the standards expected by the school district.

- 1. The inside of the bus, walls, ceilings, floor and seats will be clean and not littered
- 2. The seats and handrails will be securely fastened.
- 3. The upholstery will be in good repair.
- 4. The windows will be in good operating condition with no broken glass.
- 5. The emergency doors will be in good working condition and capable of being opened completely past the half-way point.
- 6. Emergency door handles should be painted red for easy identification.

The school bus driver who takes pride in the appearance of the vehicle will find the passengers will take pride also.

SAFE RIDING PRACTICES RELATING TO EVACUATION

A program of instruction to students on safe riding practices is necessary because of accidents caused by those students who do not understand their responsibilities as bus passengers. The following rules for safe school bus riding and general behavior for bus passengers apply also to emergency bus evacuation and must be thoroughly explained to every student:

- 1. Remain seated and quiet until the bus is completely stopped. Do not change seats unless instructed to do so by the bus driver, a paraprofessional or a teacher.
- 2. Always face forward in the seat.
- 3. Keep hands, feet and head inside the bus at all times. (If windows are allowed only half-way open, this will help discourage the problem).
- 4. Be courteous to others and pay attention to the bus driver, teacher, paraprofessional and evacuation helpers.
- 5. While moving to the appropriate exit, do not push or shove.
- 6. While leaving the bus, use the handrails or the evacuation helper's hands. Be alert for traffic and/or pedestrians.
- 7. Move to a safe place away from the school bus and remain there with the group. Re-grouping should be approximately 100 feet or 40 to 50 paces from the bus.
- 8. Be aware of the "danger zones" the areas around the bus that are "blind" spots to the driver.
- 9. Observe safety procedures while crossing the street or proceeding to the regrouping area.
- 10. Do not talk to or accept rides from anyone.

Elementary grade levels should be instructed in the most thorough manner during assemblies concerning safe riding practices. After all, these children will be riding the school bus for many years and all aspects of the subject must be stressed.

Stress to the upper grade levels the responsibilities of school bus riders with regard to student behavior. The objective is student cooperation. This cooperation will alleviate distractions and subsequently reduce the number of school bus accidents.

DANGER ZONES

The "Danger Zones" are the areas to the front, sides and rear of the school bus that are not in direct eye contact of the bus driver.

Children who, for whatever reason, come into these danger areas place themselves in jeopardy of serious injury or death. It is essential that the four "Danger Zones" (front, sides and rear), be fully explained.

If necessary, demonstrate by having one of the students go outside to the front of the bus. Have the student stoop to pick up a paper or book. Then have him/her stand. The students will get the picture very clearly. This can be demonstrated also by having a student drop a paper out of a side window. The person picking up the paper could very easily be placed in front of the rear duals

See to it that all of students, teachers, and paraprofessional are completely familiar with the "Danger Zones" before continuing.

STUDENT RESPONSIBILITY DURING EVACUATION

Every rider should know the following:

- 1. Emergency doors
 - a. Location
 - b. Operation
 - c. Count the seats to the exit.
- 2. Fire extinguisher
 - a. Location
 - b. Operation
 - c. How to remove from mounting bracket
- 3. First aid kit
 - a. Location
 - b. Types of units in the kit

NOTE: All capable riders should be familiar with the contents. Evacuation helpers may be incapacitated during an emergency.

Appendix 13

- 4. Exiting the bus
 - a. Front door
 - (1.) Use handrails provided.
 - (2.) Do not push.
 - (3.) Watch for traffic and/or pedestrians.
 - B. Floor level exits
 - (1.) Stoop down as low as possible
 - (2.) Place hands on top of evacuation helpers hands. Do not grasp.
 - (3.) Drop to ground.
- 5. Evacuation helpers
 - a. All passengers should know who is assigned.
 - b. Have assigned seats.
 - c. Know the following:
 - (1.) Seats assigned to each exit
 - (2.) Order of evacuation departure
 - (3.) How to assist others from the bus
 - (4.) How to exit themselves
 - (5.) Area to send evacuees to regroup
 - (6.) How to control the group when rejoining the other passengers.

NOTE: The passengers should evacuate to an area at least 100 feet from the vehicle. It will be a safe area out of traffic and away from any other potential danger. It should be up-wind from any fire. Passengers shall gather in a group and remain there quietly until everyone joins them.

6. The last two students out of the bus should obtain the first aid kit and the fire extinguisher.

SUMMARY

Accidents do happen. When they do it is too late to begin teaching an emergency procedure. The instruction given to students on emergency evacuation procedures may help prevent them from being injured or killed.

The purpose of the emergency evacuation simulation presentation is re-education. The students' reactions will be quicker and more exact with the knowledge, but remember it is up to the presenter to make it interesting and to be sincere during the presentation.

VISUAL AIDS

The following drills are suggested and the appropriate one chosen for use during presentations and actual emergencies.

Front Door Evacuation

Driver's instructions:

- 1. Stop the bus in a preselected location on the school grounds.
- 2. Shut off the engine, and set the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. Stand, open the front door, face the children, and get their attention.
- 6. Give the command: "Front door emergency evacuation drill remain seated."
- 7. Direct the two helpers to their places beside the front door.
- 8. Stand between the first occupied seats, facing the front of the bus.
- 9. Starting with the right-hand seat, ask the leader to lead all pupils 100 feet or 40 paces from the bus, and instruct the other occupants of the right seat to follow. WARN ALL PUPILS: "Walk. Do not run. Use the hand rails."
- 10. Hold your hand before the occupants of the left-hand seat in a restraining gesture.
- 11. When the pupils in the right-hand seat have moved forward enough to clear the aisle, dismiss the occupants of the left-hand seat.
- 12. Continue the evacuation procedure as described, right and left seats alternately, until the bus is empty.
- 13. When the last seat is empty, walk to the front of the bus, and check to ensure that everyone is out.

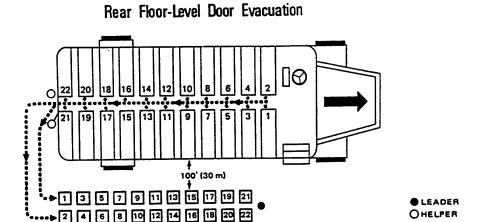
Front Door Evacuation 22 20 18 16 14 12 10 8 6 4 2 21 19 17 15 13 11 9 7 5 3 1 1 3 5 7 9 11 13 15 17 19 21 • LEADER 2 4 6 8 10 12 14 16 18 20 22 • OHELPER

REAR FLOOR-LEVEL DOOR EVACUATION

Driver's Instructions

- 1. Stop the bus in a preselected location on the school ground away from traffic. Note: Be sure that ample adult supervision is at this location before drills are held.
- 2. Shut off the engine and set the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear emergency door.
- 6. Stand, face the children, and get their attention.
- 7. Give the command: "Rear door emergency evacuation drill remain seated."
- 8. Walk to the rear of the bus, and face the door.
- 9. Use the left hand to restrain occupants of the right rear seat.
- 10. Ask the helper to open the emergency door, jump out, and take a position. (The ideal method of exit is to sit on the floor with feet outside and ease out onto the ground)
- 11. Have the second helper jump out and take a position.
- 12. Have the leader stand in the doorway to lead the rest of the pupils off the bus to a position 100 feet or 40 paces from the bus.
- 13. Before the leader jumps, turn around, face the front of the bus, and explain in what rotation (starting with the right rear seat, then left, right and so on) the pupils are to leave their seats, reminding them to remain seated until it is their turn to move.

- 14. Face the doorway and move between the left rear seats to clear the aisle. Command the leader to assume a semi squat position, reach out with both hands, hop out, and go to a position 100 feet or 40 paces away from the bus.
- 15. Tell the pupils seated in the right rear seat to leave the bus, then call for the pupils in the next left seat to leave; then the next right seat, until the bus is empty.
- 16. Keep control at the rear door to prevent any shoving or pushing. Make sure each pupil has plenty of room to assume a semi squat position making sure they duck their head before jumping.
- 17. When the last pupil has exited, walk to the front of the bus and check to ensure that everyone is out.
- 18. Go out the front door and join the waiting pupils.



SIDE EMERGENCY DOOR EVACUATION

Driver's Instructions:

- 1. Stop the bus in the preselected location on the school grounds, away from traffic. Note: Be sure ample adult supervision is at the location before the drill is held.
- 2. Shut off the engine and set the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear emergency door.
- 6. Stand, face the children, and get their attention.
- 7. Give the command: "Side emergency door evacuation drill remain seated."

- 8. Walk to the emergency door.
- 9. Ask helper number one to open the emergency door, and jump out to take a position.
- 10. Ask helper number two to jump out and take a position.
- 11. Ask the leader to jump out and lead the other pupils 100 feet or 40 paces from the bus.
- 12. Face the rear of the bus and ask pupils seated in the first right seat to leave, then left, then right, until all pupils have exited.
- 13. Face the front of the bus, and ask pupils in the first left seat forward of the emergency door to leave; then right, then left until the bus is empty.
- 14. See that all pupils remain seated until it is their turn to leave. Stay near the emergency door to space pupils so that each pupil has cleared the mat before allowing the next pupil to jump.
- 15. Check all seats to see that everyone is out, and leave through the emergency door in the same manner as the pupils and join the waiting pupils in the regrouping area.

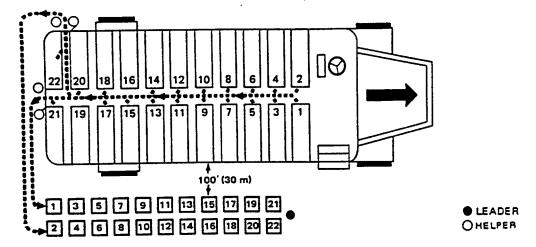
Side Emergency Door Evacuation 20 18 16 14 12 10 8 6 4 2 21 19 17 15 13 11 9 7 5 3 1 100' (30 m) 100' (30 m) LEADER OHELPER

LEFT AND REAR FLOOR-LEVEL DOORS EVACUATION

Driver's instruction:

- 1. Stop the bus in the preselected location on the school grounds, away from traffic. Note: Be sure ample adult supervision is at the location before the drill is held.
- 2. Shut off the engine and set the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear and side emergency doors.
- 6. Stand, face the children, and get their attention.
- 7. Give the command: "Left and rear door evacuation drill remain seated."
- 8. Walk to the rear row of seats and face the door.
- 9. Ask one helper to open the rear door, and jump out to take a position. Ask the second helper to take a position.
- 10. Turn, face the left-side emergency door, and ask the third helper to open the emergency door, jump out and take a position. Ask the fourth helper to jump out and take a position.
- 11. Ask the leader to take a position in the rear doorway.
- 12. Face the front of the bus and explain to the children what order they are to leave their seats, reminding them to remain seated until it is their turn to move.
- 13. Start the evacuation with the right rear seat, then left rear seat, then right, then left, until the bus is empty. All pupils seated on the right side of the bus leave through the rear door; all pupils seated on the left leave through the left rear door.
- 14. Ask the leader to assume a semi squat position, reach out and place both hands on top of the helper's hands, hop out, and go to a position 100 feet or 40 paced away from the bus.
- 15. Ask the pupils in the first right rear seat to leave through the rear door. Ask the pupils in the first left rear seat to leave through left rear door, and so on.
- 16. Stand in a position to control both doors to prevent pushing and shoving, allowing ample room for each pupil to assume a semi squat position before jumping.
- 17. This can be done by having the first pupil go out the rear door and the next pupil go out the left rear door then rear, then left, spaced to allow each pupil who has jumped ample time to clear the mats before the next person jumps.
- 18. Walk to the front of the bus, and check to ensure that everyone is out. Leave through the front door, and join the waiting pupils. The driver should evaluate the evacuation performance, point out improvements needed and commend the pupils on activities well done.

Left and Rear Floor-Level Doors Evacuation

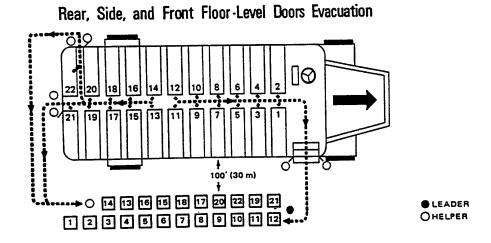


REAR, SIDE, AND FRONT FLOOR-LEVEL DOORS EVACUATION

Drivers instructions:

- 1. Stop the bus in the preselected location on the school grounds, away from traffic. Note: Be sure ample adult supervision is at the location before the drill is held.
- 2. Shut off the engine and apply the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear emergency door.
- 6. Stand, face the children, and get their attention. Open the front door.
- 7. Give the command: "Rear, side and front emergency door evacuation drill remain seated."
- 8. Ask the front first and second helpers to take their positions outside the front entrance door.
- 9. Walk to the rear door and ask the third helper to open the rear emergency door and jump out to take a position. Ask the fourth helper to jump out and take a position.
- 10. Face the left rear emergency door. Ask helper five to open the door and jump out to take a position. Ask helper six to jump out and take a position.
- 11. Walk to the front of the bus. Ask the leader to leave through the front door and take a position 100 feet or 40 paces from the bus. Start with the left front seat and ask those pupils to leave through the front door, then seat number three, then four, then five. Back down the aisle, releasing pupils from seats on alternate sides of the bus, until the center of the bus has been reached. Ask the

- rest of the students to remain seated. Walk back to the left side emergency door. Starting at the rear of the bus, ask all remaining pupils seated on the left side to leave by the left side emergency door. Stand at the left door to control the pupils and space their jumps so that each pupil has cleared the mat before allowing the next pupil to jump.
- 12. After the pupils on the left side of the bus have left the bus, turn to the rear door and ask the pupil closest to the rear door to leave. All remaining pupils are to leave through the rear emergency door. Again, see that each pupil has cleared the mat before allowing the next pupil to jump. Walk to the front and check to ensure that everyone has left the bus. Exit through the front door and go to the regrouping area.



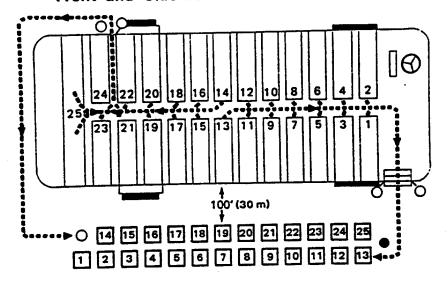
FRONT AND SIDE FLOOR-LEVEL DOORS EVACUATION

Driver's instructions:

- 1. Stop the bus in the preselected location on the school grounds, away from traffic. Note: Be sure ample adult supervision is at the location before the drill is held.
- 2. Shut off the engine, and secure the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear emergency door.
- 6. Stand, face the children, and get their attention.
- 7. Give the command: "Front and side emergency door evacuation drill remain seated "

- 8. Stand between the first two seats and ask helper number one to open the front door (using emergency release, if so equipped). Ask helpers one and two to take their positions outside, one on each side of the front door.
- 9. Ask the leader to take a position 100 feet or 40 paces from the bus.
- 10. Release the pupils in the left front seat. Step back and release the pupils in the next right hand seat, then left, and so on, until the center is reached.
- 11. Ask the rest of the pupils to remain seated.
- 12. Walk back to the left emergency door. Ask helper number three to open the emergency door. Jump to the ground and take a position.
- 13. Ask helper number four to jump out and take a position.
- 14. Ask pupils seated behind the emergency door to leave first, in proper rotation right, left, right.
- 15. As soon as the rear seats are empty, ask pupils seated forward of the emergency door to leave, starting with the right seat, then left, and so on, until all pupils are out. Be sure all pupils stay seated until their turn to leave. Stay near the side emergency door to ensure that each pupil clears the mat before allowing the next pupil to jump.
- 16. Check each seat to ensure that everyone is out and leave by the front door to join the pupils in the regrouping area.

Front and Side Floor-Level Doors Evacuation



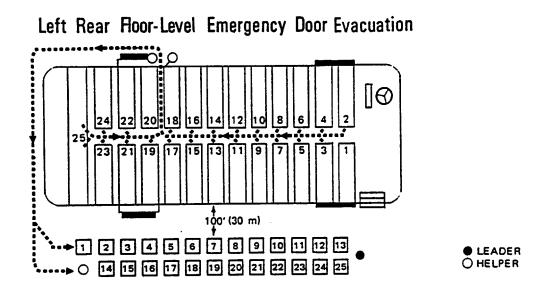
● LEADER

REAR FLOOR-LEVEL EMERGENCY DOOR EVACUATION

Driver's instructions:

- 1. Stop the bus in the preselected location on the school grounds, away from traffic. Note: Be sure ample adult supervision is at the location before the drill is held.
- 2. Shut off the engine, and secure the parking brake.
- 3. Place the transmission in first or reverse gear.
- 4. Remove the ignition key.
- 5. See that the gym mat (4 x 6 feet) is placed on the ground in the center of the rear emergency door.
- 6. Stand, face the children, and get their attention.
- 7. Give the command: "Rear door emergency evacuation drill remain seated."
- 8. Walk to the rear seat and face the front of the bus.
- 9. Ask one helper to open the emergency door, jump out, and take a position.
- 10. Have the second helper jump out and take a position. He/she becomes the pupil leader.
- 11. Ask the pupil leader to stand at the emergency door.

- 12. Explain to the pupils in what order they are to leave their seats (starting with the right rear or divan seat, the left, then right, and so on), until the bus is empty. Remind pupils to remain seated until it is their turn to move.
- 13. Ask the pupil leader to assume a semi squat position, reach out with both hands and go to a position 100 feet or 40 paces away from the bus. Pupils are told to exit and go to the pupil leader.
- 14. Remain near the emergency door to control pupils leaving the bus and to prevent shoving or pushing. See that each pupil assumes a semi squat position before jumping.
- 15. Make sure that each pupil who has jumped clears the mat on the ground before allowing the next pupil to jump.
- 16. After the last pupil leaves the bus, walk to the front of the bus and check to ensure that everyone is out.
- 17. Leave the bus by the front door and join the pupils in regrouping area.



SUMMARY

Accidents do happen. When they do, it is too late to begin teaching an emergency procedure. The main purpose is the instruction of passengers at all age levels on their responsibility as vehicle passengers in knowing about all escape routes, where each is located, how each one works, and the proper procedure for leaving a vehicle in an emergency.

APPENDIX G

DRIVER PRESENTATION (SUGGESTED)

- 1. Introduction meet students and teachers outside of the bus. (Use the public address system, if necessary.)
 - A. Have students form lines facing the bus outside of the danger zones.
 - B. Set the standards:
 - (1.) All eyes looking at you.
 - (2.) No talking.
 - (3.) Follow directions.
 - (4.) All questions will be answered at the end of the presentation. No "what if" questions.

NOTE: Make sure these standards are set as they will determine how successful the presentation will be.

- C. Explain what and why you are reviewing the bus evacuation drill program.
 - (1.) See what they remember of previous drills.
 - (2.) Introduce new material.
 - (3.) Student safety.
 - (4.) State law requires drills be performed yearly.
 - (5.) The bus driver sell professionalism.
 - a. Training required
 - b. Subjects covered

Simplify for K-3 students

- 2. Bus riding rules and bus evacuation drill
 - A. Danger zones
 - (1.) Explain briefly the location of zones.
 - a. Why should you stay out of the zones? (Have the students answer).
 - (2.) Point out the placement of cones:
 - a. Front 10 feet
 - b. Sides 6 feet
 - c. Rear 20 feet
 - (3.) Explain driver cannot see anyone in these zones. (Can you see the drivers seat from this zone?)
 - (4.) If you enter the zone to pick up a paper or book, who do you notify first? (driver)
 - B. How many students practice safe driving habits? (hands)
 - (1.) Discuss
 - C. Where are the emergency exits on the bus?
 - (1.) Front door
 - (2.) Side door
 - (3.) Rear door
 - (4.) Windows

- (5.) Roof vents
- D. Evacuation introduction emphasis (Choose children to help demonstrate exit from floor-level doors)
 - (1.) Legs bent stoop low
 - (2.) Look forward and note where landing
 - (3.) Helper's hands out in front
 - a. Helper's outside hand to jumper's hand
 - b. Helper's inside hand to jumper's elbow
- 3. Entering the bus
 - A. Walk, don't run. Explain entry procedure.
 - B. Use hand rails. Show location.
 - C. Have students form line and enter directly onto bus. Teacher should enter first to seat students. One teacher at rear of bus for control assistance. Save two seats at rear door for helpers. Save one seat for the regrouping leader. All others may be 2 or 3 to a seat.
 - D. Presenter is last to enter. Stand by front steps to assist, if necessary.
- 4. Interior bus presentation
 - A. Get students' attention.
 - B. Students should stay seated.
 - C. Discuss safety and bus operation equipment:
 - (1.) Fire extinguisher
 - (2.) First aid kit
 - (3.) Parking brake
 - (4.) Ignition
 - (5.) Two-way radio
 - (6.) Reflectors
 - D. Arms, legs, out of aisle.
 - E. Ask permission to open windows
 - (1.) Arms, hands, head, legs inside bus
 - F. Talking must stop at railroad crossings
 - G. Door operations
 - H. Questions
- 5. Drill introduction
 - A. Release those who are excused from jumping to witness from left rear side of bus.
 - B. Review:
 - (1.) Jump position
 - (2.) Do not push or shove
 - (3.) Review instructions to helpers and leader.

6. Actual drill

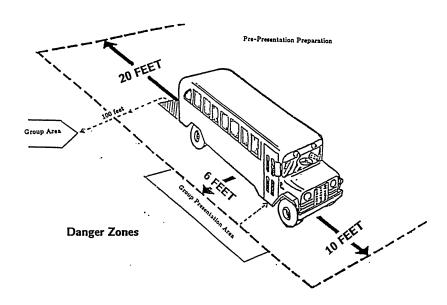
- A. Have first helper open emergency door, jump out, take a position and hold the door.
- B. Have helper two jump out and take a position.
- C. Have leader assume a semisquat position, take helper's hands, jump out and go the regrouping area.
- D. Direct students from seats right side first, then left, then right, and so on until the bus is empty.
- E. Ensure bus is empty. Exit front door and join the students in the regrouping area. Thank them for their cooperation.

7. Pre-presentation preparation of school bus (diagram)

A. Equipment required:

Seven (7) marker cones

One (1) gym pad for jump demonstration



APPENDIX H

BRIEF DESCRIPTION OF SPECIAL EDUCATION STUDENTS SUGGESTED EVACUATION PROCEDURES

EDUCABLE RETARDED (ER) - Students generally function at the 2nd to 4th grade level in academic achievement and are generally less socially mature and less able to work with the abstract than students of average or above average ability.

TRAINABLE MENTALLY RETARDED (TMR) - Students are generally 4 to 8 years retarded in their intellectual development with a functional level more severely impaired than ER students.

CEREBRAL PALSIED/ORTHOPEDICALLY HANDICAPPED (CP/OH) - Students generally possess handicapping conditions because of severe physical limitations caused by cerebral palsy, muscular dystrophy, brain injury (due to disease or trauma), polio, other OH or degenerative conditions, etc., and require special equipment, additional personal attention, wheelchairs, and other assistive devices.

DEAF AND HARD OF HEARING (DEAF/HH) - Students are not able to understand and acquire speech and language through the sense of hearing even with sound amplification and use sign language to communicate.

APHASIA - Students have normal intelligence as judged by a test which does not use oral directions or require oral expression, but falls two standard deviations below the mean in oral language areas and show severe receptive and expressive language problems.

AUTISTIC - Students generally display inappropriate behaviors, engage in self stimulating activities, and have difficulty relating to others.

DEVELOPMENTALLY DISABLED (DCH) - Students are the most limited of those involved in special education and require toilet training, feeding and dressing skills, and development of general awareness and stimulation to surroundings.

DEAF/BLIND - Students are both deaf and blind and participate in a program designed to bring them into contact with the environment around them and to increase their self-help skills, as well as developing sufficient communication skills to permit their expressing needs and relating to other humans.

EDUCATIONALLY HANDICAPPED (EH) - Students demonstrate average to above average ability on an individual test of intelligence but experience learning difficulties or behavior disorders and are placed in a special day class for four periods a day or in and LDG class for one to three periods a day.

SERIOUSLY EMOTIONALLY DISTURBED (SED) - Students are educationally handicapped in addition to displaying an emotional disturbance which cannot be dealt with appropriately in the EH programs at the local schools and display behaviors ranging from aggressive to extremely withdrawn.

BUS EVACUATION PROCEDURES

CATEGORY	EVACUATION PROCEDURE	<u>COMMENTS</u>
Deaf and hard of hearing	 Have pupil evacuate by walking or crawling to nearest unrestrictive exit. Have helper assist driver using fire extinguisher, if necessary. Have helper control other students at control area. 	 Mild communication problem; look and speak directly at pupil No noted mobility problems
Deaf/Blind	 Get attention by "tapping twice" on shoulder. Use finger spelling to indicate evacuation. 	 Restricted communication problem. No mobility problem.
Mentally retarded	 Develop routines of word commands for evacuation. May be a designated helper for blind pupils. 	 Limited communication problem No noted mobility problem.
Educationally handicapped	 Ambulatory (walk off) With capabilities help other pupils to evacuate Have students assist driver by using a fire extinguisher, if fire is present 	1. Assess each individual to determine if they can or cannot help

Multihandicapped and orthopedically impaired	1.	Nonambulatory (confined to some seating device) May crawl or need to be carried to exit.	1.	May have extreme communication and mobility problem.
Other health impaired and seriously emotionally disturbed and speech mobility impaired.	 2. 	Use a firm tone and physically direct pupil to an emergency exit. Pupil may have to be guided by another pupil to control area.		Difficult to communicate with pupils. Pupils have to walk off bus.
Specific learning disability	 2. 	Have pupil evacuate by walking to nearest exit assisted by helper Speak slowly, clearly and use simple sentences.	1.	May not understand instructions in emergency situations.
Visually handicapped	1. 2.	Can walk off with help of a selected helper. Have pupil hold hands with another pupil while evacuating. Use same method in control area.	-	Can communicate Has mobility